

General Information

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Contracting Office Address

Other Defense Agencies, Defense Advanced Research Projects Agency, Contracts
Management Office, 3701 North Fairfax Drive, Arlington, VA, 22203-1714

Description

URBAN CHALLENGE

SOL: BAA06-36

DUE: June 23, 2006

POC: Mr. Ron Kurjanowicz, DARPA/DIRO

E-MAIL: BAA06-36@darpa.mil

The Defense Advanced Research Projects Agency (DARPA) is soliciting innovative proposals for autonomous ground vehicles capable of operating safely and effectively in a dense urban area, including interaction with vehicular traffic, dynamic mission re-planning, road-following, and obstacle avoidance.

PROGRAM GOAL AND VISION: Unmanned ground vehicles must safely operate and maneuver in the presence of other moving vehicles to realize their potential to revolutionize military ground operations. Urban Challenge is the third DARPA Grand Challenge program, and has been created to accelerate technological progress through the demonstration of a field of autonomous ground vehicles in an urban area in the presence of vehicular traffic.

Vehicle navigation will be entirely autonomous, with robots exhibiting a series of complex behaviors to achieve a series of goals without human intervention. Contractor teams will develop and demonstrate a vehicle that operates in accordance with California motor vehicle laws and does not impede or otherwise hamper the free flow of human-occupied vehicles. The program capstone event in November 2007 is a demonstration of

autonomous vehicles interacting with traffic and with one another as they complete a complex mission on an urban test course.

PROGRAM DESCRIPTION: Proposers will develop and demonstrate a vehicle that will be evaluated in a series of milestone demonstrations of vehicle capability, culminating in the capstone traffic demonstration as described in the Proposer Information Pamphlet (PIP). Continuation in the program and payment at each milestone is contingent on the demonstration of vehicle capabilities according to the program plan.

At the capstone event, performers will demonstrate a vehicle that exhibits the following behaviors: safe vehicle-following; operation with oncoming traffic; queueing at traffic signals; merging with moving traffic; left-turn across traffic; right-of-way and precedence observance at intersections; proper use of directional signals, brake lights, and reverse lights; passing of moving vehicles; and all the other behaviors implicit in the problem statement. Vehicles will also demonstrate navigation with limited waypoints and safe operation in complex areas such as parking lots. Recognition of traffic signals, street signs or pavement markings is considered outside the scope of the program, as this information will be furnished by DARPA. High-speed highway driving is also outside the scope of the program. Other details regarding the required behaviors are provided in the PIP.

Technical POC for this effort is Ron Kurjanowicz, BAA06-36@darpa.mil.

AWARD INSTRUMENT: Proposers will specify the use of a conventional Federal Acquisition Regulations (FAR) contract, or a Section 845 Other Transactions (OT) for Prototypes Agreement. Proposers who specify the use of an OT must indicate in the proposal whether they qualify as a non-traditional defense contractor, have teamed with a non-traditional defense contractor making a significant contribution, or are providing a one-third cost share for this effort. FAR contracts will be fixed price efforts with payable milestones. Proposals should not include profit or fee.

FUNDING: DARPA expects to make base awards for efforts that do not exceed \$1M including cost share, if applicable. The Proposer is expected to provide a realistic technical and management plan to achieve the program objectives as described in the milestone schedule provided in the PIP. The Government reserves the right to select all, some, or none of the proposals received in response to this solicitation. Proposal preparation costs shall not be allowable as a direct charge to any resulting contract or agreement. Final funding determination will be based on the combination of proposed approaches that will reasonably support program success. Historically Black colleges and Universities and Minority Institutions are encouraged to submit proposals, but no portion of this BAA will be set aside for these organizations.

APPLICABILITY: Awards will be made on the basis of full and open competition. Governmental organizations may not respond to this solicitation. These organizations are referred to www.darpa.mil/grandchallenge for more information.

PROPOSAL EVALUATION: Proposals will be evaluated against the following criteria, in descending order of importance: 1) Technical approach, 2) Management and Funding Plan, 3) Strength of team. More detailed evaluation criteria are given in the PIP. Only one proposal will be considered from each prime contractor.

PROPOSAL PROCEDURES: Proposers must obtain and refer to a pamphlet entitled BAA 06-36 Urban Challenge Proposer Information Pamphlet, which provides information on technical objectives, submission process, evaluation criteria, and proposal format information. This pamphlet may be obtained from <http://www.fedbizopps.gov/> , <http://www.darpa.mil/baa>, or by e-mail to the administrative contact address given below. Proposals not meeting the format described in the PIP will not be reviewed. The full proposal (original and designated number of paper and electronic copies) must be submitted to attn: Ms. Kristen Fuller/Urban Challenge BAA 06-36, Defense Advanced Research Projects Agency, 3701 North Fairfax Drive, Arlington, VA 22203-1714 on or before 5:00 PM Eastern Daylight Time on Friday, June 23, 2006. Responses not received at this address before this time will not be considered.

No classified information or technology restricted under the Arms Export Control Act (22 U.S.C. 2778) may be used in this program.

ORGANIZATIONAL CONFLICT OF INTEREST: All Proposers must affirmatively state in the proposal whether they are supporting any DARPA technical office(s) through an active contract or subcontract at the time of proposal submission. All affirmations must state which office(s) the Proposer supports and identify the prime contract number. Affirmations must disclose the existence or potential existence of organizational conflicts of interest, as that term is defined in Federal Acquisition Regulations (FAR) 9.501. This disclosure shall include a description of any action the Proposer has taken, or proposes to take, to avoid, neutralize or mitigate such conflict. If the Proposer believes that no such conflict exists, then the Proposer shall so state in the affirmation.

NON-GOVERNMENT PERSONNEL: The Government intends to use support contractors and other independent experts to assist in processing and administering proposals during the Source Selection and to provide advice relative to specific technical areas. These personnel are contractually restricted from disclosing information contained in any proposal for any purpose to anyone outside of the Source Selection Committee. Moreover, all personnel used in this capacity are required to enter into Organizational Conflict of Interest/Non Disclosure Agreements to this effect. By submission of a proposal, a team agrees that proposals may be disclosed to these personnel for the purpose of providing this assistance.

PRECEDENCE OF THE BAA: In the event of discrepancies between the BAA and the PIP in the stated requirements, proposal submission instructions, or other items, the BAA shall take precedence.